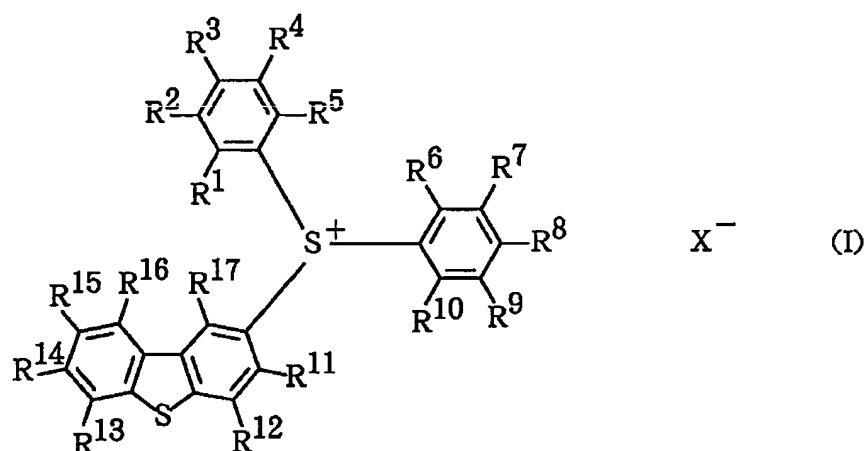


CLAIMS

1. An aromatic sulfonium salt compound expressed by a general formula (I),

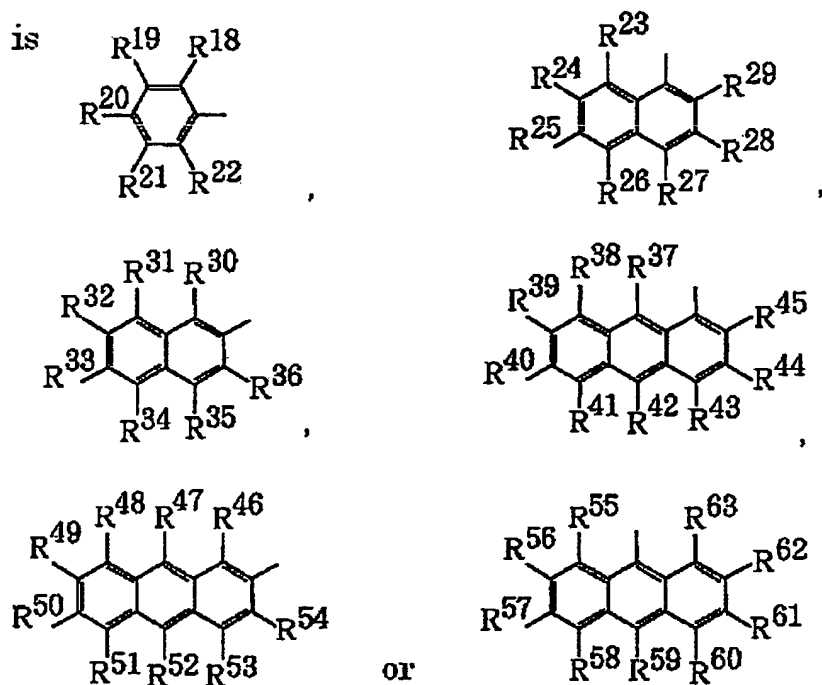


wherein, R¹ to R¹⁷ are identical or different, respectively a group selected from the group consisting of hydrogen, halogen, nitro, hydroxyl, alkyl, alkoxy, acyl, phenoxy, ester, aryl, thioether, thiocarbonyl, sulfinyl, sulfonyl, amino, amide, imide, nitrile, phosphino, phosphonio, phosphoryl and fluoroalkyl groups of 1-8 carbon atoms, wherein the moieties other than the functional groups of these groups can be saturated aliphatic hydrocarbon, unsaturated aliphatic hydrocarbon, alicyclic hydrocarbon, carbocyclic aromatic hydrocarbon or heterocyclic aromatic hydrocarbon of 1-12 carbon atoms, and R⁵ and R⁶ can be condensed

together with to form a covalent bond.

2. The aromatic sulfonium salt compound according to Claim 1,
wherein acyl group is R-CO- or Ar-CO-, where

Ar is



and R is straight or branched alkyl group, or alicyclic hydrocarbon group, and R¹⁸ to R⁶³ are identical or different, respectively hydrogen, halogen, hydroxyl, alkyl or alkoxy.

3. The aromatic sulfonium salt compound of Claim 1 or 2, wherein X⁻ is an anion group selected from the group consisting of SbF₆⁻,

PF_6^- , AsF_6^- , BF_4^- , SbCl_6^- , ClO_4^- , CF_3SO_3^- , CH_3SO_3^- , FSO_3^- , F_2PO_2^- ,
p-toluene sulfonate, camphor sulfonate, nonafluorobutane
sulfonate, hexadecafluorooctane sulfonate and tetraaryl borate.

4. A photo-acid generator comprising the aromatic sulfonium salt
compounds of any of Claims 1 to 3

5. A photo-polymerizable composition comprises (1)
cationically polymerizing organic substances and (2) the
photo-acid generator of Claim 4 as energy beam sensitive
cationically polymerizing initiator, as essential components.

6. A photo-polymerizable composition of Claim 5, which
additionally comprises (3) radically polymerizing organic
substance and (4) energy beam sensitive radical polymerizing
initiator, as essential components.

7. The photo-polymerizable composition of Claim 5 or 6, wherein
at least one among the (1) cationically polymerizing organic
substance is an organic compound having one or more epoxy group
in a molecule.

8. The photo-polymerizable composition of any of claims 5 to 7, which comprises a compound having a cyclohexenoxide structure in a molecule at the content of 30% by weight or more based on the(1) cationically polymerizing organic substance.

9. The photo-polymerizable composition of any of Claims 6 to 8, which comprises a compound having (meth)acrylic group in a molecule at the content of 50% by weight or more based on the(3) radically polymerizing organic substance.

10. The aromatic sulfonium salt compound according to Claim 1 or 2, wherein at least one of R^1 to R^{17} in the general formula (I) is acyl group.

11. The photo-acid generator of Claim 4, wherein the aromatic sulfonium compound is the aromatic sulfonium salt compound of Claim 10.

12. The photo-polymerizable composition of any of Claims 5 to 9, wherein the photo-acid generator is the photo-acid generator of Claim 11.

13. A stereolithographic resin composition comprising a photo-polymerizable composition of Claim 12.

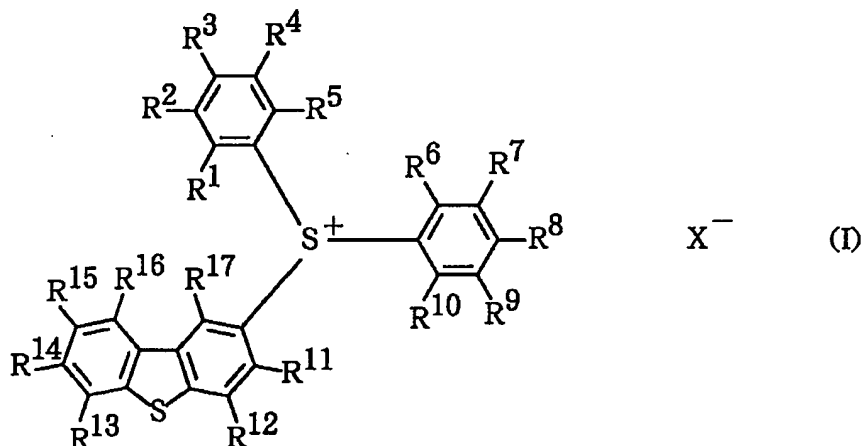
14. A stereolithographic process, wherein an energy beam curing resin composition is the stereolithographic resin composition of Claim 13, the energy beam curing resin composition is exposed to an energy beam to cure the exposed portion thereof, in order to produce a desired thickness of cured layer; then, the cured layer is overlaid with another layer of the energy beam curing resin composition, which is radio-cured in the same manner to produce a cured layer which continuously overlaps the first above-described cured layer; and the same process is repeated to finally obtain a three-dimensional molding.

15. The stereolithographic process of Claim 14, wherein the energy beam to expose is a ultraviolet ray.

16. The stereolithographic process of Claim 15, wherein the stereolithographic resin composition is exposed to the beam, the energy of the beam with an emission wave length of 345 to 360nm being not less than 70% based on the total energy of the beam with an emission wave length of 250 to 400nm.

17. The stereolithographic process of any of Claims 14 to 16, the energy beam to expose is a laser beam.

18. An aromatic sulfonium salt compound expressed by a general formula (I),



wherein, R^1 to R^{17} are identical or different, respectively a group selected from the group consisting of hydrogen, halogen, nitro, hydroxyl, alkyl, alkoxy, acyl, phenoxy, ester, aryl, thioether, thiocarbonyl, sulfinyl, sulfonyl, amino, amide, imide, nitrile, phosphino, phospho, phosphoryl and fluoroalkyl groups of 1-8 carbon atoms, wherein the moieties other than the functional groups of these groups can be saturated aliphatic hydrocarbon, unsaturated aliphatic hydrocarbon, alicyclic hydrocarbon, carbocyclic aromatic hydrocarbon or heterocyclic aromatic

hydrocarbon of 1-12 carbon atoms, and R^5 and R^6 can be condensed together with to form a covalent bond, provided that R^1 to R^5 are not all hydrogen at the same time, and that R^6 to R^{10} are not all hydrogen at the same time, X is the same described above.

19. The photo-acid generator of Claim 4, wherein the aromatic sulfonium compound is the aromatic sulfonium salt compound of Claim 18.

20. The photo-polymerizable composition of any of Claims 5 to 9, wherein the photo-acid generator is the photo-acid generator of Claim 19.

21. An ultraviolet curing ink composition which comprises the photo-polymerizable composition of Claim 20.

22. An ultraviolet curing ink composition for wrapping material of foods which comprises the photo-polymerizable composition of Claim 20.

23. An wrapping material of foods printed by the ultraviolet curing ink composition of Claim 21 or the ultraviolet curing ink

composition for wrapping material of foods of Claim 22.